

IN THE CLAIMS:

Please cancel Claims 1 to 12 without prejudice to Applicants' right to present these claims in a later-filed division. Please amend Claims 13 to 19 and 21 to 23, as shown below. The claims, as pending in the subject application, read as follows.

1 to 12. (Cancelled)

13. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal comprising the ~~following step~~ steps of:

~~single-crystallizing~~ providing a BaTiO₃ - PbTiO₃ compact powder member or sintered member substance having a smaller ~~Pb-containing mol~~ Pb content mole number than ~~Ba-containing mol~~ Ba content mole number by defining the range of the ~~mol~~ molar ratio of elements contained therein to be $0.9800 < (\text{Ba} + \text{Pb}) / \text{Ti} < 1.0000$; and by

heating said compact powder or sintered substance, while keeping said compact powder or member sintered substance in non-molten condition.

14. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 13, wherein the range of the ~~mol~~ molar ratio of elements contained in said compact powder ~~member~~ or sintered ~~member-to-be~~ substance is $0.9900 < (\text{Ba} + \text{Pb}) / \text{Ti} < 0.9999$.

15. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 14, wherein the range of the ~~mol~~ molar ratio of elements contained in said compact powder ~~member~~ or sintered ~~member-to-be~~ substance is $0.9950 \leq (\text{Ba} + \text{Pb}) / \text{Ti} \leq 1.0000$.

16. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 13, wherein the ratio of PbTiO₃ content in said compact powder

~~member~~ or said sintered ~~member~~ substance is 45 mol % or less.

17. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 16, wherein the ratio of PbTiO₃ content in said compact powder ~~member~~ or said sintered ~~member~~ substance is 30 mol % or less.

18. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 17, wherein the ratio of PbTiO₃ content in said compact powder ~~member~~ or said sintered ~~member~~ substance is 25 mol % or less.

19. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 13, comprising the ~~following~~ step of:

single-crystallizing by heating said compact powder ~~member~~ or sintered ~~member~~ substance within a temperature range of 1,200°C or more and 1,400°C or less.

20. (Original) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 13, wherein a compound containing lead is inserted into a furnace during the single crystal growing process to generate steam containing Pb for the growth of BaTiO₃ - PbTiO₃ series single crystal.

21. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to ~~Claim 13~~ Claim 20, comprising the ~~following~~ step of:

single-crystallizing by heating, while keeping said compact powder ~~member~~ or sintered ~~member~~ substance in the lead atmosphere and in non-molten condition.

22. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 13, comprising the ~~following~~ steps of:

preparing BaTiO₃ series single crystal or BaTiO₃ - PbTiO₃ series single crystal as

seed crystal;

coupling BaTiO₃ - PbTiO₃ series sintered member composed of crystal grain of average granular diameter of 20 μm or less, having the relative density of 95% or more, with the {100} plane, {110} plane, or {111} plane of said seed crystal; and

single-crystallizing by heating, while keeping said coupled substance in non-molten condition.

23. (Currently Amended) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 20, wherein the ~~mol~~ molar ratio of elements contained in said BaTiO₃ - PbTiO₃ series sintered ~~member~~ substance is within a range of $0.9950 \leq (\text{Ba} + \text{Pb}) / \text{Ti} \leq 0.9999$.

24. (Original) A method for manufacturing BaTiO₃ - PbTiO₃ series single crystal according to Claim 22, wherein a compound containing lead is inserted into a furnace during the single crystal growing process to generate steam containing Pb for the growth of BaTiO₃ - PbTiO₃ series single crystal.